

Remarks/Arguments

Applicants respectfully appreciate the tentative allowance of claims 17-20 if placed in independent form and the allowance of claims 23-25.

Reconsideration of the above-identified application in view of the present amendment is respectfully requested.

By the present amendment, claims 1, 3-6, 9-10, 16, 18, and 21 have been amended, and claims 2, 8, and 17 have been cancelled.

Below is a discussion of the 35 U.S.C. §112, second paragraph, rejection of claims 3-6, 10, 18 and 21, the 35 U.S.C. §102(b) rejection of claims 1, 3-4, 6-7 and 14-15, the 35 U.S.C. §102(b) rejection of claims 1, 3, 6-8, 10 and 14-15, the 35 U.S.C. §102(b) rejection of claims 1, 7-8, 10, 14 and 15, the 35 U.S.C. §102(e) rejection of claims 1-7, 14-16, 21 and 22, the 35 U.S.C. §103(a) rejection of claims 9-12, and the 35 U.S.C. §103(a) rejection of claim 13.

1. **35 U.S.C. §112, second paragraph, rejection of claims 3-6, 10, 18 and 21.**

Claims 3-6, 10, 18, and 21 were rejected under 35 U.S.C. §112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. The Office Action argues with respect to claims 3-6 and 21, that the addition of the word "type" to an otherwise definite expression AB_x alloy, AB/A₂B alloy, and AB₂ alloy renders claims 3-6 and 21 indefinite. The Office Action also argues that claim 3 is indefinite because it is not clear what "x" is. Further, the Office Action argues that claims 10 and 18 are indefinite because they contain the trademark/trade name Nafion™.

By the present amendment, the term "type" has been deleted in claims 3-6 and 21. Claim 3 has also been amended to define what "x" is. As amended, claim 3 recites the storage material of claim 1, wherein the hydrogen-absorbing alloy particles comprise at least one material selected from the group consisting of AB_x-type alloys, AB/A₂B-type alloys, and AB₂-type alloys, and x has a value between 1.5 and 2.5. Support for amended claim 3 can be found at page 10, line 8 of the present Application. Claims 10 and 18 have been amended by deleting the term "Nafion™" and adding "sulfonated tetrafluoroethylene copolymers." Nafion™ is the general tradename for a sulfonated tetrafluoroethylene copolymer. Accordingly, withdrawal of the 35 U.S.C. §112, second paragraph, rejection is respectfully requested.

2. 35 U.S.C. §102(b) rejection of claims 1, 3-4, 6-7 and 14-15.

Claims 1, 3-4, 6-7, and 14-15 were rejected under 35 U.S.C. §102(b) as being anticipated by Wu *et al.* (U.S. Patent No. 5,451,474) (hereinafter, "Wu et al.").

Claim 1 has been amended to include the limitations of claims 2 and 8. Claim 1, as amended, is not anticipated by Wu et al. because Wu et al. do not teach the limitations of claims 2 and 8, i.e., the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm, and a hydrogen-absorbing storage material containing a binding agent which at least partially covers the mechanically alloyed storage material particles so as to effect firm binding between the mechanically alloyed storage material particles while allowing free passage of

hydrogen in and out of the mechanically alloyed storage material particles.

Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection of claim 1 is respectfully requested.

Claims 3-4, 6-7, and 14-15 depend either directly or indirectly from amended claim 1 and therefore should be allowable because of the aforementioned deficiencies in the rejection of claim 1 and because of the specific limitations recited in claims 3-4, 6-7, and 14-15.

3. 35 U.S.C. §102(b) rejection of claims 1, 3, 6-8, 10 and 14-15.

Claims 1, 3, 6-8, 10, and 14-15 were rejected under 35 U.S.C. §102(b) as being anticipated by Lee *et al.* (U.S. Patent No. 6,332,908) (hereinafter, "Lee et al.").

As discussed above, Claim 1 has been amended to include the limitations of claim 2. Claim 1 is not anticipated by Lee et al. because Lee et al. do not teach the limitations of claim 2, i.e., that the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm . Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection of claim 1 is respectfully requested.

Claims 3, 6-8, 10, and 14-15 depend either directly or indirectly from amended claim 1 and therefore should be allowable because of the aforementioned deficiencies in the rejection of claim 1 and because of the specific limitations recited in claims 3, 6-8, 10, and 14-15.

4. 35 U.S.C. §102(b) rejection of claims 1, 7-8, 10 and 14-15.

Claims 1, 7-8, 10, and 14-15 were rejected under 35 U.S.C. §102(b) as being anticipated by Tsuji *et al.* (U.S. Patent No. 6,048,644) (hereinafter, "Tsuji *et al.*").

As discussed above, claim 1 has been amended to include the limitations for claim 2. Claim 1 is not anticipated by Tsuji *et al.* because Tsuji *et al.* do not teach the limitations of claim 2, i.e., that the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm . Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection of claim 1 is respectfully requested.

Claims 7-8, 10, and 14-15 depend either directly or indirectly from amended claim 1 and therefore should be allowable because of the aforementioned deficiencies in the rejection of claim 1 and because of the specific limitations recited in claims 7-8, 10, and 14-15.

5. 35 U.S.C. §102(a)/§103(e) rejection of claims 1-7, 14-16, 21 and 22.

Claims 1-7, 14-16, 21, and 22 were rejected under 35 U.S.C. §102(a) as being anticipated by Kanoya *et al.* (U.S. Patent Pub. No. 2002/0033209) or as being anticipated under 35 U.S.C. §102(e) by Kanoya *et al.* (U.S. Patent No. 6,656,246) (hereinafter, "Kanoya *et al.*").

As discussed above, claim 1 was amended to include the limitations of claim 8. Claim 1 is not anticipated by Kanoya *et al.* because Kanoya *et al.* do not teach the limitations of claim 8, i.e., a hydrogen-absorbing storage material containing a binding agent which at least partially covers the mechanically alloyed

storage material particles so as to effect firm binding between the mechanically alloyed storage material particles while allowing free passage of hydrogen in and out of the mechanically alloyed storage material particles. Accordingly, withdrawal of the 35 U.S.C. §102(a) rejection of claim 1 is respectfully requested.

Claims 3-7, and 14-15 depend either directly or indirectly from amended claim 1 and therefore should be allowable because of the aforementioned deficiencies in the rejection of claim 1 and because of the specific limitations recited in claims 3-4, 6-7, and 14-15.

Claim 16 has been amended to include the limitations of claim 17. Claim 17 was indicated in the Office Action as being allowable. Withdrawal of the rejection of claim 16 is therefore respectfully requested.

Claims 21 and 22 depend directly from amended claim 16 and therefore should be allowable because of the aforementioned deficiencies in the rejection of claim 16 and because of the specific limitations recited in claims 21 and 22.

6. 35 U.S.C. §103(a) rejection of claims 9-12.

Claims 9-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. or Tsuji et al. in view of Ikeda *et al.* (U.S. Patent No. 6,770,226) (hereinafter, "Ikeda et al."). The Office Action argues that Lee et al. and Tsuji et al. differ from claims 9-12 in that they do not teach forming an electrode by adding a solvent to the mechanically alloying hydrogen storage material containing binder. The Office Action also argues that Ikeda et al. teaches a method for forming an electrode for alkali batteries comprising adding solvent and a binder agent to the hydrogen storage material to form a slurry and then applying the slurry to an

electrically conductive core body to form a coating. Thus, the Office Action argues, it would have been obvious to one skilled in the art at the time the invention was made to utilize the method of Ikeda et al. to make the electrode of Lee et al. or Tsuji et al.

Claim 9 depends directly from claim 1. Claim 9 is not obvious over Lee et al. and Tsuji et al. in view of Ikeda et al. because the combination of these references do not teach or suggest the limitation in claim 1 that the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm . As noted above and in the Office action, both Lee et al. and Tsuji et al. do not teach or suggest the limitations that the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm . Ikeda et al. also does not teach or suggest this limitation. Accordingly, Lee et al. and Tsuji et al. in view of Ikeda et al. do not teach or suggest all of the limitations of claim 9; therefore, withdrawal of the 35 U.S.C. §103(a) rejection of claim 9 is respectfully requested.

Claims 10-12 also depend either directly or indirectly from amended claim 1 and therefore should be allowable because of the aforementioned deficiencies mentioned above in the rejection with respect to claim 9 and because of the specific limitations recited in claims 10-12.

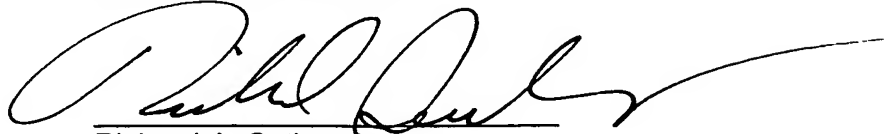
7. 35 U.S.C. §103(a) rejection of claim 13.

Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. or Tsuji et al. in view of Ikeda et al., and further in view of Hampden-Smith et al. (U.S. Patent Pub. No. 2002/0168570) (hereinafter, "Hampden-Smith et al."). The Office Action notes that Lee et al. and Tsuji et al. in view of Ikeda et al. differ from claim 13 in that none of these references teaches a solvent having a low viscosity suitable for screen-printing and ink-jet printing application. The Office Action argues that Hampden-Smith et al. discloses various known methods for making battery electrodes using thick-film paste, such as a thick-film or ink-jet printing process. Thus, the Office Action argues it would have been obvious to one of skill in the art to employ well known techniques to form the electrode of Lee et al. and Tsuji et al.

As discussed above with respect to claim 9, Lee et al., Tsuji et al., and Ikeda et al. do not teach or suggest the limitation in claim 1 that the hydrogen-absorbing alloy particles have a diameter between approximately 1 μm and 10 μm and transition metal particles disposed at least on the surface of the hydrogen-absorbing alloy particles have a diameter of between approximately 0.1 μm and 1.0 μm . Hampden-Smith et al. also do not teach or suggest this limitation. Accordingly, Lee et al. and Tsuji et al. in view of Ikeda et al. and Hampden-Smith et al. do not teach or suggest all of the limitations of claim 13; therefore, withdrawal of the 35 U.S.C. §103(a) rejection of claim 13 is respectfully requested.

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matter to our Deposit Account No. 20-0090.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Richard A. Sutkus', written over a horizontal line.

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